

Section 7. Timed Approaches

6-7-1. APPLICATION

Timed approaches using either nonradar procedures or radar vectors to the final approach course may be used at airports served by a tower if the following conditions are met:

NOTE-

These procedures require NAVAID's and standard/special instrument approach procedures or adequate radar coverage which permit an aircraft to:

1. Hold at a fix located on the approach course or to be radar vectored to the final approach course for a straight-in approach in accordance with the minima specified in para 6-7-5, Interval Minima.

2. Proceed in the direction of the airport along the approach course crossing the holding/approach fix at a specified altitude if required.

3. Continue descent for an approach to destination airport.

a. Direct communication is maintained with the aircraft until the pilot is instructed to contact the tower.

b. If more than one missed approach procedure is available, none require course reversal.

c. If only one missed approach procedure is available, the following conditions are met:

1. Course reversal is not required.

2. Reported ceiling and visibility are equal to or greater than the highest prescribed circling minimums for the instrument approach procedure in use.

NOTE-

Determination of whether or not an existing ceiling meets minima is accomplished by comparing MDA (MSL) with ceiling (AGL) plus the airport elevation.

REFERENCE-

FAAO 7110.65, Approach Sequence, Para 6-7-2.

6-7-2. APPROACH SEQUENCE

When an aircraft passes the final approach fix inbound (nonprecision approach) or the outer marker or the fix used in lieu of the outer marker inbound (precision approach), issue clearances for a succeeding timed approach in accordance with the following:

REFERENCE-

FAAO 7110.65, Approach Separation Responsibility, Para 5-9-5.

FAAO 7110.65, Level Flight Restriction, Para 6-7-4.

FAAO 7110.65, Missed Approaches, Para 6-7-7.

a. Clear the succeeding aircraft for approach, to descend to the altitude vacated by the preceding aircraft, and to leave the final approach fix inbound (nonprecision approach) or the outer marker or the fix used in lieu of the outer marker inbound (precision approach) at a specified time; or when using radar to sequence and position aircraft on the final approach course, vector aircraft to cross the final approach fix/outer marker or the fix used in lieu of the outer marker in compliance with para 6-7-5, Interval Minima.

Timed Approach Procedures Using ILS and Longitudinal Separation Only

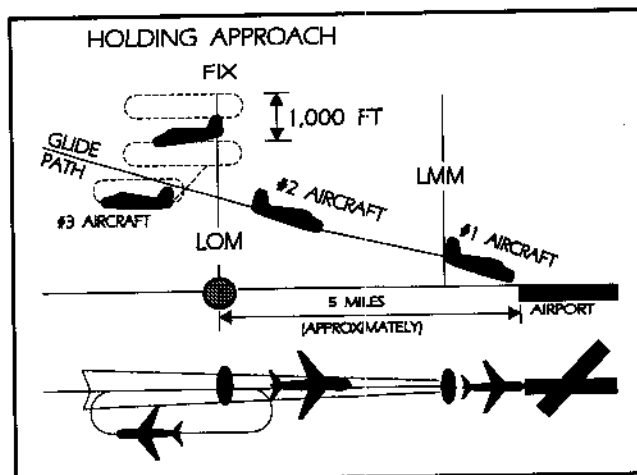


FIG 6-7-1

NOTE-

FIG 6-7-1 depicts the application of timed approach procedures using an ILS and applying longitudinal separation only. Using an interval of 2 minutes between successive approaches, the #1 and #2 aircraft have already passed the outer locator (LOM) on final approach, and the #3 aircraft has been cleared for approach and to depart the LOM 2 minutes after the #2 aircraft reported leaving the LOM inbound on final approach. After aircraft in the approach sequence depart the holding/approach fix (LOM) inbound, vertical separation is no longer provided and longitudinal separation is utilized.

REFERENCE-

FAAO 7110.65, Final Approach Course Interception, Para 5-9-2.

b. If an alternative missed approach procedure is not available and weather conditions are less than required by para 6-7-1, Application, subpara c, clear the succeeding aircraft for an approach when the preceding aircraft has landed or canceled its IFR flight plan.

**Timed Approach Procedures
Using a Bearing on an NDB and Longitudinal and
Vertical Separation**

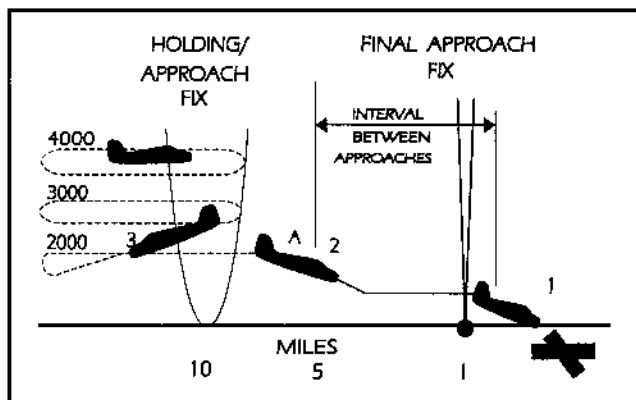


FIG 6-7-2

NOTE-

FIG 6-7-2 depicts the application of timed approach procedures using a holding/approach fix on a bearing of an NDB and applying a combination of longitudinal and vertical separation. The #3 aircraft has been instructed to descend to 2,000 after the #2 aircraft has reported departing the holding/approach fix inbound and leaving 2,000 at point A. The #2 aircraft has departed the holding/approach fix inbound at the designated time, maintaining 2,000 until cleared for approach at point A. The #1 aircraft has been sighted, enabling the controller to issue approach clearance to the #2 aircraft at point A.

c. Release the aircraft to the tower before it reaches the final approach fix.

6-7-3. SEQUENCE INTERRUPTION

Interrupt the established timed approach sequence if necessary to allow an aircraft to execute a different type of approach.

6-7-4. LEVEL FLIGHT RESTRICTION

If the weather report indicates an aircraft will be in IFR conditions over the final approach fix (nonprecision approach) or the outer marker or the fix used in lieu of the outer marker (precision approach) when para 6-7-2, Approach Sequence, subpara b is applied, clear the second aircraft for an approach early enough to allow at

least 1 minute of level flight before crossing the final approach fix/outer marker or the fix used in lieu of the outer marker.

6-7-5. INTERVAL MINIMA

Use a 2-minute or a 5-mile radar interval (except for a small aircraft behind a heavy aircraft: use a 3-minute or a 6-mile radar interval) as the minimum between successive approaches and increase the interval, as necessary, taking into account the:

NOTE-

Increased separation is required for small aircraft behind heavy aircraft because of the possible effects of wake turbulence.

REFERENCE-

FAAO 7110.65, Approach Separation Responsibility, Para 5-9-5.

FAAO 7110.65, Application, Para 6-7-1.

FAAO 7110.65, Approach Sequence, Para 6-7-2.

- a. Relative speeds of the aircraft concerned.
- b. Existing weather conditions.
- c. Distance between the approach fix and the airport.
- d. Type of approach being made.

6-7-6. TIME CHECK

Issue a time check to an aircraft before specifying a time to leave the approach fix inbound unless the aircraft is vectored to the final approach course.

6-7-7. MISSED APPROACHES

a. If weather conditions are such that an aircraft will likely miss an approach, issue an alternative missed approach procedure to the next aircraft.

b. If an aircraft misses an approach, allow the next aircraft to continue the approach if it has been assigned an alternative missed approach procedure. Retain radar control or hold any remaining aircraft at assigned altitudes until traffic conditions permit the issuance of approach clearances.

c. When para 6-7-2, Approach Sequence, subpara b is applied and the first aircraft misses an approach, retain radar control or clear the second aircraft to maintain the last assigned altitude (minimum holding altitude) and return to the holding/approach fix to hold until traffic conditions permit the issuance of approach clearances.